## **Abstract**

A method and apparatus for monitoring and controlling the nano-scale flow rate of fluid in the operating flow path of a HPLC system without relying on a nano-scale sensor in the operating flow path. A main flow sensor is disposed in the main flow path between the pump and a flow-divider. A waste flow sensor is disposed in the waste flow path downstream of the splitter. The output signal of the waste flow sensor is subtracted from the output signal of the main flow sensor in a difference circuit. The difference signal is divided by the output signal from the main flow sensor in a divider circuit. The output of the divider circuit represents an empirical split ratio of the flow-divider and is independent of media composition.

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